

V-Ring System (Project 06-24) (6/07)

The V-Ring System from TrioDent is a sectional matrix product for establishing proper interproximal contour and contact for Class II resin composite restorations. Sectional matrix systems from other manufacturers contain retainer rings made from stainless steel or plastic. The V-Ring retainer consists of a nickel-titanium outer ring and a stainless steel inner ring. The retainer ring has V-shaped tines that provide space for a wedge and hold the sectional matrix band securely. The company states that this forms a natural anatomic shape on both narrow and wide embrasures. The system includes unique disposable sectional Tab-Matrices of various shapes and sizes. These sectional matrices have a tab with a hole on the occlusal portion and holes on the buccal and lingual ends to facilitate grasping with a Pin-Tweezers, a specialized hand instrument. The kit includes V-Wedges: plastic wedges in three sizes and two levels of hardness. An instructional DVD video is provided with the kit, and TrioDent also has a Web site with directions for using the system. The company provided "Wave Wedges" that are modified V-Wedges and double wedges for this evaluation. TrioDent plans to add both of these products to the Intro kit.



Manufacturer:

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Suggested Retail Price:

\$389.00 Intro Pack (item number 2080)
- 3 V-Rings
- Ring placement forceps
- 50 each of 4.5-, 5.5- and 6.5-mm tab matrices
- Assorted V-wedges
- Pin tweezers
- DVD instructional video

Government Price:

\$330.65 Intro Pack (item number and contents as listed above)

ADVANTAGES:

- + Rings provide effective wedging resulting in excellent proximal contacts
- + Provides better contours for wide buccolingual restorations
- + Design allows proper wedge placement
- + Variety of matrices and wedges available in Intro Pack
- + Placement and removal of tab-matrix is simplified by matrix design and pin-tweezers

DISADVANTAGES:

- More expensive than other segmental systems
- Difficult to use with tight interproximal contacts
- Retainer ring is larger than in other systems

SUMMARY AND CONCLUSIONS:

The V-Ring system is a sectional matrix system specifically designed to help the clinician when placing posterior resin composite restorations. It provides both wedging and matrix contouring in a single system. The unique design of the ring tines provides space for placing a wedge interproximally without compromising the location of the tines. The shape of the ring tines also provides better contours for wider restorations. The introductory kit comes with an instructional DVD to review before using the matrix system. Some evaluators felt that this system produced better contacts and contours than other segmental matrix systems. Even though the retainer ring was made of two dissimilar metals, sterilization testing did not cause significant corrosion after 200 cycles. Because of the retainer ring size, evaluators found it awkward to place if close to a rubber dam clamp or placing two rings for an MOD restoration. Clinicians also found it challenging to place the soft matrix in a tight contact. This has also been noted for all segmental matrix systems previously evaluated. The preference of type of wedge used (i.e., wood, V-wedge, Wave wedge) was provider specific. The **V-Ring System** is rated **Excellent** for use in US Air Force dental facilities.